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OLDEST BEE PAPER IN AMERICA

# THE WEEKLY BEE JOURNAL

DEVOTED TO THE INTERESTS OF HONEY PRODUCERS.

ESTABLISHED IN  
1861.

Chicago, Ill., May 14, 1884.

VOL. XX.—No. 20.

## THE WEEKLY EDITION

THE AMERICAN  
**BEE JOURNAL**

PUBLISHED BY

**THOMAS G. NEWMAN,**  
EDITOR AND PROPRIETOR.

925 WEST MADISON ST., CHICAGO, ILL.

Weekly, \$2 a year; Monthly, \$1.

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**THOMAS G. NEWMAN,**

925 West Madison Street., Chicago, Ill.

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We can supply photographs of Rev. L. L. Langstroth, the Baron of Berlepsch, or Dzierzon, at 25 cts. each.

We now club the *British Bee Journal* and our Monthly for \$2.50, or it and the Weekly for \$3.50.

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My bees are in fine condition this spring. I have lost but 4 out of 182 colonies. The outlook is fine for a good season.

L. J. DIEHL.

Butler, Ind., May 7, 1884.

The Lucas County Bee-Keepers' Association will meet at A. Reusch's apiary on Saturday, May 17, at 10 a. m. Bee-keepers are cordially invited. Bring your dinners, and have a basket picnic among the bees.

A. REUSCH, Sec.

Letters for publication must be written on a separate piece of paper from items of business.

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**Preparation of Honey for the Market**, including the production and care of both comb and extracted honey, and instructions on the exhibition of bees and honey at Fairs, etc., by T. G. Newman. This is a chapter from "Bees and Honey." Price 10c.

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**Bee Pasturage a Necessity**, by Thomas G. Newman.—Giving advanced views on this important subject, with suggestions what to plant, and when and how: 26 engravings. This is a chapter from "Bees and Honey." Price, 10c.

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**The Hive I Use**.—Being a description of the hive used by G. M. Doolittle. Price, 5c.

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**King's Bee-Keepers' Text-Book**, by A. J. King.—This edition is revised and brought down to the present time. Cloth, \$1.00.

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**Honig als Nahrung und Medizin**—von Thomas G. Newman. Dieses enthält eine klare Darstellung über Bienen und Honig des Alterthums; die Beschaffenheit, Qualität, Quellen und Zubereitung des Honigs für den Handel; Honig als Nahrungsmittel, angebend wie man Honigkuchen, Formkucheln, Puddings, Schaumconfect, Weine, u. s. w. zubereiten kann; ferner Honig als Medizin mit vielen Rezepten. Es ist für den Conumenten bestimmt, und sollte vieltausendfältig über das ganze Land verbreitet werden. Preis 6 Cents.

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THOMAS G. NEWMAN.

925 West Madison St. CHICAGO, ILL.



# Weekly Bee Journal,

DEVOTED TO THE INTERESTS OF THE PRODUCERS OF HONEY.

VOL. XX.

CHICAGO, ILL., MAY 14, 1884.

No. 20.

## THE AMERICAN BEE JOURNAL

Published every Wednesday, by

THOMAS G. NEWMAN,  
EDITOR AND PROPRIETOR.

### The Honey Crop of California.

We have received the following explanatory letter from Messrs. Geo. W. Meade & Co., of San Francisco, Cal., dated April 29, 1884. They say:

In the BEE JOURNAL of April 23, we notice that Messrs. Stearns & Smith, of this city, dispute the figures we gave in our annual review, as a close approximation of the California honey crop of last year, in which we set forth the total production at 960,000 lbs. The firm above referred to, place the quantity at 1,387,000 lbs.; in other words, an excess over our figures of 427,540 lbs.

Our figures were compiled, as they always are, from the only reliable sources in all the honey sections of the State; and, in making figures, we deal with *weights* only, and not cases, as both the cases used for comb and extracted honey now differ in size and quantity of honey contained therein.

Let us analyze the figures as given by Messrs. S. & S. They state the receipts at 8,456 cases extracted honey, which, it seems, they figure at 120 lbs. net weight each. Allowing that the number of cases is correct, although it is not known where they obtained their information, it is a fact well known to large honey dealers here that fully *one-half*, if not more, of this honey was packed and received this year in cases of *one-tin* each, which hold only about 70 to 75 lbs. net of honey. Deduct, therefore, 50 lbs. each on, say 4,500 cases of honey, and we have a deficiency on the start on extracted honey alone of 225,000 lbs. from their figures.

The same authority also places the production of comb honey at 4,228 cases, which they figure at 60 lbs. net each, or 253,480 lbs., an equivalent of 12 to 13 cars of comb honey; when from the most reliable sources in the whole State, our own purchases, as the largest dealers, and inquiries with commission dealers, we cannot learn that the entire product of comb honey the past year exceeded from 125 to 150,000 lbs. all told; and these figures

we believe to be correct enough for all practical purposes.

Deducting, therefore, 125,000 lbs. of comb honey from their figures, we have a further deficiency in their comb honey estimates of 128,480 lbs.

Taking up their figures on "shipped from interior," all of which were included in our original estimates, and working on the same basis, fully one-half in *one-tin* cases, we can easily make a deduction of 50,000 lbs. from their estimate of 118,340 lbs., thus reducing the quantity to 68,340 lbs.

In conclusion, therefore, we beg to recapitulate as follows:

Estimate made by S. & S. ....	1,387,540
Less deficiency extr. ....	225,000
comb. ....	128,480
Int. ship. ....	50,000
	403,480

Net production .....	984,060
Our figures .....	960,000

Difference .....	24,060
------------------	--------

While these figures, as given by us, are not claimed to be *absolutely*, yet we know them to be *approximately* correct; and we again assert, without any fear of successful contradiction, that the total honey crop of California for the past year, according to our original figures, was somewhere between 950,000 and 1,000,000 lbs.

An Apostle in days of old said: "Without controversy, great is the mystery of godliness." After reading the foregoing, we may remark: Without controversy, great is the honey crop of California!! While, perhaps, neither the figures of Messrs. Meade & Co. or Stearns & Smith, are *absolutely* correct—they show most plainly that the honey crop of last year was quite satisfactory, taken as a whole, and has been shipped to all quarters of the globe.

We are glad to get these figures from the two rival honey merchants of San Francisco, for they show conclusively that there is no collusion, and the figures are near enough for all practical purposes, no matter which are the nearest to the exact amount.

While we thank both firms for their interesting figures, we think there is no need of further dispute concerning the small discrepancy between the two estimates. We only wish we

had two such firms in every large city of the East; for competition is the life of trade—especially the honey trade. What is needed more than anything else, is men who will push the sale of honey and thus create a market for the product.

Prof. Cook writes us that he has sold 2,000 copies of his Manual during the past year. The twelfth thousand being just published. The Manual is a deservedly-popular book, and we congratulate the Professor upon his success with it.

We have received a pamphlet of 44 pages, by Mons. Ed. Bertrand, of Nyon, Switzerland, entitled "The Care of Colonies of Bees; or a calendar of apiculture, with advice for beginners, in the management of bees." It consists of a detailed system of management of bees for each of the months of the year, and covers the entire ground of manipulation. It is published in French; and is scientific, progressive and practical.

Mr. I. V. McCagg, President of the Eastern Iowa and Western Illinois Bee-Keepers' Association, has sent out postal card blanks to each member, and desires that they all be filled out and returned to him, so as to enable him to make a complete report to all the members, before the swarming season commences.

Mr. F. A. Chapman wishes to correct the statement concerning the 800 pounds of honey on page 215. He exhibited it at the Industrial Exhibition held in Cobourg last October, instead of at the Industrial Exhibition in Toronto last September, as there stated.

Mr. Ira Barber desires to correct his article concerning ventilation, in the middle of the third column of page 264. He meant that those *not* ventilated at the top of the hive were in just as good condition as when put into the cellar, and that all upward ventilation was abandoned.

## CORRESPONDENCE

For the American Bee Journal.

### Controlling a Field.

G. M. DOOLITTLE.

I read with much interest the article found on page 86, by James Heddon, upon the subject of "Locating and Occupying a Field;" and I agree with his views, providing the occupant is a person who is about to change his location in search of a better or different field. In this case, a man who would locate near another apiary to the disadvantage of both himself and the owner thereof, must be so bereft of reason and the spirit that would "do unto others as ye would that they should do unto you," that any course of getting rid of the intruding party would be justifiable. But there is another side to this question, which I wish to speak of, to which Mr. H. does not allude, purposely or otherwise.

It so happens the oftener that the person who will injure the occupant of a field the most, is one who is already an owner of a large property near you, who, from poor health, jealousy, or your reported success in bee-keeping, desires to try his hand at the business. This person, perhaps, is a farmer, a merchant, or a lawyer, who does not want to leave his present location to start an apiary, neither could he well do so if he chose. He starts out with the desire to keep but a few colonies for his amusement, and a little honey for his family, thinking that this will not harm you in the least. After starting, he has a good year as well as you, and he becomes enamored with the pursuit. He falls to reasoning, and says: "I own a large farm, producing plenty of plants and trees which produce honey. Is not this mine by priority, and is there any reason that I should not keep all the bees I wish on account of Mr. — wishing his bees to monopolize my fields? No, sir; I will keep all the bees I wish, and if Mr. — thinks he will crowd me from the field by putting in more bees than I have, I will show him that I can put in 10 colonies to his one." Thus our bee-keeper, by using Mr. Heddon's advice on this man, has "cut off his own nose to spite his face."

What I want to get at is the right of the thing, and for this reason I am going to give a little personal history.

I was born and brought up within 50 rods of where I now live. Father kept bees when I was a small boy, getting as high as 60 colonies in box hives. These all died when I was about 10 years old, of that dreaded disease, foul brood. When I became of age there were about 250 colonies within two miles of us, kept by 3 or 4 persons. From reading King's Bee-Keepers' Text Book, a desire sprang up for bees. Father and I talked the matter over, and the result was we

purchased 4 colonies when I was 22 years old. That fall he gave me his, and I started out alone in the bee business.

I am often amused now, as I look back, at the ideas I then entertained. My highest aim was 20 colonies, and I hoped to secure an average yield from them of 20 lbs. each, or 400 lbs. total; this, at 20 cents per pound, would give \$80. Eighty dollars would give me quite a lift, and I could care for the bees and the farm at the same time, without extra help.

After I had increased to about 30 colonies (did not stop at the 20, you see), the man living about one mile from me, and having the largest number of bees of any one (120 colonies), came to me and talked quite similarly to what Mr. H. advocates, saying I was injuring his business, and as he had a large apiary before I began to keep bees, I ought to quit the business and leave the whole field to him.

I told him that father had kept bees long before he ever thought of keeping them, and that I expected to keep at the business as long as it was profitable, as we had a farm, and I did not see why my bees did not have as good a right to visit the clover and basswood on that farm as any body else's bees. The result was that he felt that I was wrong, and I felt justifiable in the course I pursued.

I wish here to ask Mr. Heddon if he does not think I had a right to keep bees under the circumstances? Well, right or wrong, with the 250 colonies against our 4 to start with, I have lived to see the time when not one of the parties who then kept bees have a bee at the present time. This shows that some man smarter than I may yet start in bee-keeping in my field, and cause me to move out or quit bee-keeping; so Mr. Heddon's "neighbor Jones" may yet cause "Mr. K." to relinquish his field in spite of Mr. Kendall's priority and additional numbers.

But to return to my story. When I had increased to about 100 colonies, a colony of bees was given by a friend to a neighboring farmer, whose land joined with my father's. As we were good friends, he often came to see me and talk bees, which I was always free to do.

He came out the next spring with one weak colony, which did not seem to build up any. He desired me to go and see it one day, which I did. I told him to come over on a certain day and I would show him how to fix his colony. He came, and I gave him a frame of brood just biting the covers to the cells, and told him to take it home and place it in the centre of his little cluster of bees. He did so, and from this he now has nearly 40 colonies. He often says if it had not been for Doolittle, he would never have had a bee, while I realize (knowing the man) that had I not done this, or rather had I shown the spirit toward him, "Kendall" did toward "Jones," in Mr. Heddon's articles, he would have been the worst rival in bee-keeping I could possibly have. As it is, he is contented to double back his bees to 20 colonies each spring, and

keeps them for pleasure, and profit also; for he secures nearly or quite as good results from his bees as I do from mine.

Two other neighbors starting in bee-keeping (one living a mile away, and the other  $2\frac{1}{2}$  miles), I have treated as friends, telling them how I worked bees, and showing them freely all I know of the business, till to-day one has 45 colonies and the other 80, each expecting to make a specialty of bee-keeping. In this I have only done as I would be done by, were I starting again, whether Mr. H. thinks it right or wrong.

Now, as I said at the outset, I believe Mr. H. to be right (as long as there are plenty of unoccupied fields) in his advice regarding bee-men who are changing their location; but I cannot think the same course applied to friendly neighbors is a correct one. I believe in letting live as well as living; and if my neighbor desires to start in bee-keeping, there is no law, moral or legal, to hinder him from so doing. After he has once determined to start, I believe he will cause me less trouble if I treat him in a neighborly way, then he would were I to try to show him that I thought he had no business keeping bees.

But perhaps Mr. Heddon thinks as did my good friend Elwood, who once told me that he thought I was doing the bee-fraternity much harm by writing so much information to the bee-papers, and reporting my yields of honey; for, said he, "by so doing you are enticing thousands into our ranks, through your articles, only to be a curse to us by causing lower prices for our honey from an over-production of the same."

Perhaps I am wrong, and mistook my calling when I left farming to enter bee-keeping. Be this as it may, I have never written with but one object in view; namely, that of benefiting others by my experience, as I have been benefited by the experience and writings of such men as Gallup, Quinby, Langstroth and hosts of others. I have only told of bee-keeping as I found it to be, without fear or favor.

Borodino, N. Y.

For the American Bee Journal.

### Assorting and Grading the Honey.

JOHN G. SMITH.

How to grade the honey, has for a long time perplexed my mind, and is still unsolved. No doubt there are very many others who are questioning the feasibility or practicability of the apiarist to grade or classify the particular kinds of honey, save two grades; viz., spring honey and fall honey.

In my opinion the true source from which the honey is gathered by the bees at any particular time, cannot be ascertained, from the fact that we have so very many different flowers in bloom at the same time.

I have kept bees on the improved plan for 5 years, and my observations have been that bees of the same col-



only do gather honey from various kinds of flowers all at the same time; and that each bee gathers a particular kind of honey. For instance, if a bee starts out in the morning and works on a particular flower, it will invariably gather from that same source all the day, and perhaps for several succeeding days, while another bee will visit some other flower in like manner.

At this time we have, in this locality, many thousands of different flowers in bloom, with our bees gathering from every source. It is simply spring honey. My neighbors say that I have my bees so well trained that I can handle them as though they were flies; but I have yet to see the colony of bees so well trained that they will all gather one kind of honey at the same time.

New Canton, Ill.

For the American Bee Journal.

### A Bee-Keepers' Union Wanted.

R. J. KENDALL.

Every article in any number of the BEE JOURNAL, dealing with the question of marketing honey, I always read with interest—and I read too few. I entirely agree with Mr. H. O. Edwards, that this subject does not seem to receive enough attention. To me it seems that the cause of the present low rates for honey is very much the fault of bee-keepers themselves.

Mr. Geo. W. House, "from time immemorial" almost, has been preaching up co-operation; but no one appears to pay much attention to him, if we may take actions as evidence of attention. Yet in co-operation, undoubtedly, lies the real secret of success. We want co-operation in communities, in counties, in States, and throughout the whole country. About a year ago I showed how, by co-operation, any section could educate the honey consumers of that section to take either extracted or comb honey; but my article fell as flat as ditch water, on the community; no one apparently took any notice of it, and we are still going on in the same old rut.

I believe that by combination and study, bee-keepers could net \$1,000 per year as an average income; and this amount is by no means high. If a man runs an average of 100 colonies, he ought to get an average of 100 pounds per colony, and this would give 10,000 pounds of honey, which, at 10 cents per pound, would give \$1,000. Is 10 cents per pound too much? Is 100 pounds per colony too much? Surely not. Yet we see extracted honey quoted at 6½, 7, and 7½ cents per pound. Honey sold at retail at 15 cents per pound is cheap; and a 5 cent margin should pay all expenses from producer to retailer; and I believe by right management it could be done.

This method of shipping honey indiscriminately to commission merchants is bad, and tends directly to lower prices, as any one who has lived in a large city will testify; i. e., if he has had experience with commission

merchants. The better way would be to either select some one man to handle all the honey, or else establish our own agency on the co-operation plan. To such a central depot, honey could be shipped in bulk, and be there bottled, labeled, etc., and sold to retailers at not less than a certain price; or it could be sent already bottled, labeled or canned ready to retail. But I hear some one say, "if such a course were adopted, some firm would start up to cut prices." Not positively. For in the first place, with unity amongst honey-producers, such a firm would be unable to get honey at less than 10 cents per pound; or if it did, it would get inferior honey from persons who produced it incidentally, and were simply bent on getting something for an article upon which they had bestowed little or no care. The consequence in the end would be increased repute for the honey produced by the union men, and their brand would become the staple brand.

Now, to prove that my idea is sound, I may say that the honey dealers, Messrs. W. H. Hoge & Co., of London, are now advertising the formation of a honey-producing and honey-selling company, with a capital of £80,000 (nearly \$400,000) in 80,000 shares, of £1 each. They propose to purchase 10,000 colonies of bees in California; ship the honey produced to England, and sell it in the London market, both wholesale and retail. They say, as one inducement to speculators to join them, "the monopoly is complete." If a number of capitalists can do that, surely a number of honey-producers can also do it.

Now, if every legitimate honey-producer was to become a member of our union; and every union a member of a central union, they could control the honey market. They could keep an even supply in all the markets, so that St. Louis should not be glutted and Chicago short, or *vice versa*. Every producer would know just where to send his honey, and by a little organization, we could get regular honey railway cars, with an attendant who could travel with it, to collect the honey, once, twice, or three times per year, and so get better and safer carriage, delivery, etc. I believe the saved burstage and leakage would pay the extra expense of all this. In fact, it would seem that things have all the room to improve, and very little to go the other way.

When at a convention of honey-producers, a leading apiarist gets up and says they cannot calculate on getting more than 5 cents per pound net for honey, honey-producing is below par; for a man, if he is intelligent, desires something more than a bare existence, and that is about all honey at 5 cents per pound will give him. As to local honey markets' of course no man will sell in them at less than 10 cents per pound, and he would always be at liberty to sell at more. If every honey-producer were to decide that he would not sell at less than 10 cents net, in the city market, and 11 or 12 cents in the local market, but keep it first, honey would fetch higher prices. But just so long as men act on the princi-

ple of "every one for himself, and the devil take the hindmost," so long will the foremost not fare so well as he would if he co-operated with his fellows.

Again, we do not want to try to induce every body to become bee-keepers. Any person who really desires to become a bee keeper, by all means help him by advice, etc., but this trying to induce everybody to keep bees, I am convinced is going to benefit nobody. The idea I urge, will benefit alike all good bee-keepers, whether they combine bee-keeping with any other business or not; and it will cause a wide gulf between them and those who let the "bees work for nothing and board themselves," and whose only care is to get the honey every fall.

Finally, bee-keepers who agree with me in the above, do not let this matter rest by your simply saying, "That's a good idea;" but keep up the agitation until we get a "Bee-Keepers' Trade Union." No doubt many will read this article, look at the name of the writer, and say, "Kendall! who's he? He's nobody;" and so pass it by. Never mind who Kendall is, or who he is not. Call him Jones if you like, but consider the idea, which is not original with me, on its merits. If it is bad, give us a better. That "in union there is strength," is as true of bee-keepers as of others; and if we are wise we will work on it.

Austin, Texas.

For the American Bee Journal.

### Improved Section Case.

FRANK A. EATON.

I have sent you one of my Section Cases to be placed in the BEE JOURNAL Museum. I believe the points of most importance in a section case are: 1. To have a case that the bees will enter and work in the most readily. 2. One from which the sections can be removed with ease, and that will keep the sections clean.

These are what I claim for my Case. The bees can enter all parts of it as readily as in any Case I know of. The sections can be removed at all times of the year with ease, and without reversing the Case (as with the Heddon Case), and driving them out, thus breaking out some of the honey.

The Heddon Case has some few points of merit, but they are so few that I would not use it. In the first place there is valuable space taken up with partitions; there is no protection from propolis and wax, to the bottom of the sections, and they are difficult to remove when full. These objections are all overcome in my Case.

I prefer, for the most of the comb honey, sections 4¼x4¼, and 7 to the foot. My Case is to be used without separators, and by using sections with narrow tops and bottoms, the bees will seldom bulge one comb into another.

In this Case the sections set perfectly compact, which economizes all

of the valuable space above the brood-chamber. One or two tiers of sections can be used, as desired, in the same Case, by covering it with burlap, or any kind of cloth. With narrow top sections, it is very easy to tell when the bees are at work in them, or when they are full, by raising it.

It can be used to great advantage in out-door wintering, by leaving it on the hive and placing your cloth in the bottom and filling with chaff or leaves, which will make ventilation enough, and absorb the moisture during confinement, thereby preventing diarrhoea in winter. I do not claim that my Case is perfection itself, but I believe it to be practical, and in advance of any Case I know of.

Bluffton, Iowa.

[The Case is placed in the Museum for the examination of visitors.—ED.]

For the American Bee Journal.

### Surplus Cases—Bee-Diarrhoea.

JAMES HEDDON.

I have tried very hard to make some improvement upon my surplus comb honey Case. I cannot do it. I do not think that Mr. Dibbern has done it. I do not think that he is using my Case. I think my claims would not be broad enough to call his changes a Heddon Case. I have no claim upon the tin T.

I have never considered my Case best adapted to separators, though its solidity, cheapness, lightness and simplicity are such that I am not at all sure but that short separators going between the wood partitions of the Case just as it is, would be better, involving less complication taken all in all, than the Case described by Mr. Dibbern.

I am glad that he is not so far "off" as to throw away the invaluable bee-space. Our bee-spaces, however, never enlarge.

I will now mention what I believe two serious disadvantages with Mr. D.'s plan. 1. As his rows of sections are separated from each other at their bottoms by the thickness of the T, the same opening must exist at the top, with nothing but glue to fill it. 2. It always has been a fact, and will soon be more fully appreciated, that it is of great importance that we have, and stick to a standard size of brood frame and section.

Practically we have their measurements before us in the shape of standard Langstroth, and  $4\frac{1}{4} \times 4\frac{1}{4}$ .

Now, I cannot make a light, strong, simple case to suit me; that is of a neat proper outside fit for the length of the standard Langstroth hive, and an inside fit for any given number of  $4\frac{1}{4} \times 4\frac{1}{4}$  sections. If all the wood in my divisions were in the end pieces, the case would be no heavier, but not as strong.

Mr. D. says that many cannot dispense with separators. By the way they rose up at the last Northwestern Convention in Chicago, it would seem that many can and are dispensing

with them. I do not believe that many will wish to use them after using the  $1\frac{1}{2}$  inch section in my original Case.

I have never had any trouble in variation in size of sections. A section would need be exceedingly plump to refuse to go between the partitions; but I can readily see that 4 such plump sections might amount to a misfit in Mr. Dibbern's style of Case.

I do not think it advisable for us to change our sizes of sections except in width; and this we do, keeping that width always such that some whole number of sections will measure one foot. The 2-inch section is 6 to the foot;  $1\frac{1}{4}$  scant, 7 to the foot;  $1\frac{1}{2}$ , 8 to the foot. We can use all 3 sizes in one case at a time; and all 3 sizes fit the shipping crates equally well.

I have tried hard, and have come to the conclusion that for a surplus case without separators, the one I use cannot be improved. If I am mistaken, time and experience will show it.

I wish to say to Mr. Shepherd, with whom I well know how to sympathize, that my apiary has suffered with the ravages of that disease, more radically than his of last winter; and that, too, when not one drop of fall honey was in the hives, and the combs being well filled with rich, ripe basswood honey, well sealed, in a large, dry, warm cellar, and out-doors the same way. I have also, at other times, had excellent success when wintering almost exclusively on honey from the fall flowers he mentions.

Mr. Woodward is coming pretty near to the mark on page 249. His final conclusion, however, will not do. While it is true that brood-rearing is a friendly partner with bee-diarrhoea, it cannot be looked upon as the first cause, or more than one of the favorable conditions or aggravations, because many can testify to the disease in radical form with no attempts at breeding, present.

Dowagiac, Mich.

For the American Bee Journal.

### Introducing Queens.

D. R. ROSEBROUGH.

A great many queens are lost when introducing them; but I have not lost one of the 25 I introduced the past year. My method is as follows: First find the queen you wish to supersede, cage her, and place the cage above the bees. It is better to have a one or  $1\frac{1}{2}$  story hive. I then move the quilt, put the cage with the wire down, and leave it in that position about one hour, by that time all the bees will learn that their queen is imprisoned. Now remove her, and put the new queen in the same place, leaving her until sundown, when she may be liberated, after which the work is completed.

The old way of caging the queen for 3 days, is a failure; for in that time the bees very often take up with a drone-laying queen, and the new queen is killed, and the colony about ruined.

Do the work in the morning, but if you cannot readily find the queen,

close the hive again and wait; do not be in a hurry, for you can keep the new queen a week or more if necessary.

I would ask Prof. Cook why he objects to the use of oil-cloth in the place of a honey-board. I notice that he condemns the use of it, but gives no reason. I had concluded that it was the best thing to use, but if any thing else is better, I would like to find it out. Others besides myself are interested in this matter.

Casey, Ill.

For the American Bee Journal.

### Winter Stores, Pollen, etc.

H. V. TRAIN.

Mr. A. A. Fradenburg, on page 76, asks me to explain, 1. Why his bees had diarrhoea when fed on clover honey. I did not intend saying that bees never would have diarrhoea while eating clover honey; but that clover honey is less apt to sour than late honey; and hence, is safer for winter food. There is no honey that will not sour under certain conditions; and even sugar syrup will sour sometimes and cause diarrhoea; but it is less apt to do so, if made thick, than fall honey, and hence, is safer for winter stores; and the same is true of clover honey. In question No. 2, he asks if I ever knew of a colony to have the diarrhoea when there was no pollen in the hive. I answer no; for the reason that I never knew of such a colony; and it is very difficult to get a colony in that condition. If we feed pure sugar syrup at any time when there is pollen in the fields, or its substitute to be had, the bees are sure to store either the pollen or its substitute, while storing the syrup. They will do this for the reason that it is a necessary article in their household operations.

Bees get a substitute for pollen from various sources. My kind of meal will do; and they get it even from sawdust. I have often seen them loading their baskets from sawdust heaps; and, unless, we give them combs which have never been in a brood-chamber, there will surely be some pollen in the combs. I have never yet succeeded in getting a colony into the cellar without some pollen, or its equivalent in the hive. Others may have done so, but unless they have examined very carefully, I should be inclined to doubt.

Honey will sour in one colony when it does not in another at its side, and in the same temperature. In one, the honey may be ripier than in the other; or there may be more bees in the one than in the other, and hence, the difference.

Honey will not sour while covered with bees, or as warm as the bees' breath; but when honey outside of the cluster gets cold enough to condense their breath, or rather the vapor therein, it becomes wet, and if this is long continued, the honey will sour.

See Mr. Heddon's remark on page 74, under "Frost Proof House." "But when below (that is the temperature),



dampness will injure the honey at once." Every body knows if you breathe upon any cold non-conducting substance, it becomes wet at once; and every honey-producer is aware that if honey is kept wet, it will soon spoil.

Mauston, Wis.

### Mahoning Valley, O., Convention.

The annual meeting was held at Newton Falls, O., on Thursday, April 10, 1884.

Pres. Carson asked, "What is peavine clover, its habits and growth?"

Mr. Page: It is a very rank-growing clover. Its seed matures from the first growth of the season, and I think, secretes a large quantity of sweets.

Mr. Ovitt asked, if a double-walled hive with a dead-air space was not preferable to packing with chaff, and said: I have noticed that those who pack with chaff are no more successful than others. I fear that the chaff will gather dampness and engender disease, while with the air-space, the natural warmth of the bees will dry this portion of the hive. I notice the most of my loss in wintering, is by not having proper ventilation; they smother, or there is not enough circulation.

Mr. Langton: I have tried for the last three years the dead-air packing, and my bees came through well. I have tried two methods of wintering in clamps, out-door and in a cellar. My way of out-door wintering is as follows: I dig a trench some 4 inches wider than the hives, and 8 inches deep on ground, well drained. Fill this space with chaff or fine cut straw, lay a plank lengthwise on the straw, place two strips 2 inches square running parallel with the plank; take the bottom off of the hives, and place them on these strips; then take boards and form an inverted-shaped covering; cover with straw a few inches deep, then with about 8 to 10 inches of soil. At one end of the clamp I put in a small ventilator; take four laths and nail them together, and let it reach down near the bottom of the hives. At the other end I put in another one lying horizontally and protruding through the bank of earth, and running through under the first hive, covered with a little straw to exclude the light. With this system of packing, I have never lost a colony. By it the bees are kept dormant, and there is a proper circulation of air. Bees kept in this way consume but little honey, compared with the old way of keeping them. My method of cellaring bees is as follows: I stand the hives 2 feet from the cellar wall, pack one tier above the other, if the room is limited; and ventilate as in the clamp process, by perpendicular ventilators run up into the room above. The percentage of loss is small by this process. As to giving bees a flight in winter, I do not practice it. If I find that they are uneasy and make a rumbling noise, I water them by placing an empty section inverted on the cap of the hive just un-

der the carpet. They will drink readily, and then it is all quiet.

Mr. Page: I am aware that we can overdo the chaff packing. We pack too closely, and do not properly ventilate.

Mr. Bowman: The dead-air space is preferable to close chaff packing.

Mr. Ovitt: I tried the feeding of a colony which had no pollen, with sugar syrup, and was successful. For extracted honey this is a good process.

Mr. Bowman: If honey gathered late in the fall is not fit to winter bees on, is it right to offer it on the market?

Mr. Langton: We would be killing our own market; always sell a first-class article.

Mr. Paine: I have a quantity of not first quality of honey gathered late in the fall; what can I do with it?

Mr. Langton: Feed it in the spring when the bees are gathering pollen.

Adjourned till the afternoon.

First on the afternoon programme was the election of officers, which resulted as follows: For President, Leonard Carson; for Vice-President, S. S. Ovitt; for Secretary, E. W. Turner, Newton Falls; for Treasurer, H. A. Simmons; and an executive board of three, C. D. Kistler, C. R. Page, and C. G. Beardsly.

The subject of queen rearing was then discussed.

Mr. Bowman: First have a strong colony; remove the queen; examine the frames and find a nice frame of eggs, and watch carefully the hatching of each, or give a frame of eggs to a small nucleus, and let it rear a queen from this frame of eggs; as to testing of queens, I let them remain with the nucleus.

Mr. Page: I wish perfect cells. To do this I draw a knife across the top of the cells, sometimes cutting the comb in two, say 4 inches from the top of the frame.

Mr. Langton: I use a strip of foundation and destroy every other cell, so as to enlarge the distance between the cells.

Mr. Page: I use new combs.

"How early in the spring is it admissible to commence to feed your bees to stimulate brood-rearing?"

Mr. Langton: I take my bees out of the cellar as soon as it is safe to do so. I thoroughly clean out the hives, insert the division-board, and commence to feed as soon as the bees commence to gather pollen.

Mr. Hammon: I live close to a flour mill; my bees have no trouble in gathering pollen.

Mr. Page: I clean out the hives; put the bees on as few frames as possible; feed pure honey, and about the first of May I go over the hives again, give them more frames, and get ready for business.

Mr. Langton: I even up my colonies about May 1; take frames from a strong colony and insert it into a weaker one, and work up a strong force in this way. Some colonies gathered as high as 120 pounds of honey last season.

Mr. Bowman: I put my bees into winter quarters, and do not disturb them until apple-bloom is over.

Mr. Simmons: I commence to feed early by giving them flour and granulated sugar. Maple syrup is one of the best sweets to feed bees.

Mr. Hammon: I prefer pure Italian bees.

Mr. Bowman: The Italians are the standard bees for gathering honey; the Cyprians are a good breed, especially the American bred.

Mr. Simmons: I think the Langstroth hive is preferable for all purposes; at least it is my choice.

Mr. Langton: The Simplicity-Langstroth hive is my preference.

Mr. Hammon: I have used all the modern hives, and find the Langstroth the least trouble.

Mr. Simmons: Millet clover is one of the best honey-producers; it blooms all the season.

Mr. Page: In my section of the country basswood abounds in the woods.

Mr. Bowman: I would plant locust and the tulip. Melilot clover is one of the best honey-producing plants.

It was moved that a vote of thanks be tendered Mr. W. Z. Hutchinson, and others for their able articles.

The President then appointed Mr. Hammon and Mr. Page as essayists for our next meeting.

Adjourned to meet in Newton Falls, on June 6, 1884.

E. W. TURNER, Sec.

LEONARD CARSON, Pres.

For the American Bee Journal.

### Priority of Location.

J. E. POND, JR.

Mr. Heddon, in his article which he holds out to be an answer to myself, either misunderstands my position or forgets the nature of the article to which I replied; for he nowhere touches upon my own position in regard to the question. This being so, I should not feel called upon to reply further, were it not that Mr. H. claims that because I am a lawyer, I am not the best qualified person to decide the matter in dispute.

Now, without contending to boast of my intellectual qualifications, I fail wholly and entirely to see why the fact that I am a lawyer disqualifies me in any sense from forming and expressing a correct opinion.

But what is this question that a lawyer is not able to decide? Simply this: Mr. H., in the original article which drew a reply from me, assumed that no one had a right to locate an apiary in a field already occupied. To this position I demurred, and I still demur; and claim that one person has the same right as another to locate an apiary wherever he chooses.

As well might "the butcher, the baker, and the candle-stick maker" claim right of priority in a certain town, as for an apiarist so to do. Mr. H.'s whole article is an attempt to prove a matter which is not disputed by me, and one that I did not suppose was even a question of dispute, viz: that a fully occupied field cannot be further sub-divided without causing loss to all its occupants. This matter

I admit; but the question of priority of location giving a person any exclusive right of occupancy I deny, both as a lawyer and a man; and fail as yet to see any good reason why my denial is entitled to less weight because I am a lawyer.

Foxboro, Mass.

For the American Bee Journal.

### Diarrhoea—Marketing Honey.

J. E. CADY.

Of the many causes producing disease in bees, I think worry is the main one. I have seen bees spot the hive in a few minutes after I had removed their queen, on a beautiful summer day. In winter frequent disturbance, even if they have the best of honey, will cause them to spot the hive. Scarcity of honey, either from granulation in the cells or by becoming sour, or in any way unsuitable for the sustenance of bee-life, and long confinement will bring on the disease.

I do not think cold has any direct cause, but indirectly by causing honey to granulate, gather dampness, and sour. Pollen has nothing to do with it, except when it gathers dampness, ferments and mixes with the honey, then it has the same effect as sour honey, having lost its proper element as bee-food. We might as well exclude the honey from the hive for fear of its souring, as to exclude pollen. If bees are forced to eat pollen from a lack of honey, they will starve, and all will become sick if starved. Old bees cannot live a great while in the winter, even upon the nicest quality of pollen.

To supply proper food in sufficient quantities, is a long step in the right direction; but time will change the quality of honey in any cellar. My cellar is so dry that when I sweep up the bees, it raises a dust; and yet it is no place to keep honey in first-class condition, even in the summer. There are two outside hatchways to it, and it can be ventilated in a few moments, making it as nice as an upper room.

When brood-rearing begins in the spring, bees want water, especially if they are in a dry cellar; this causes a worry that makes them spot the hive. All hives should have a hole within easy reach of the bees, above the entrance that cannot be clogged with bees. In colonies which worry, the bees will come to this hole. Now, with an awl make a small hole about 1 inch above and a little to the right of the first one; press a tack into it, then hang a small wet cloth on the tack, so it will hang down by the opening in the hive; keep this cloth wet, and your bees will not suffer much from worry. If the honey has granulated, the water will assist them to eat it. If they still worry, it is evident that sour honey or a scarcity of stores is the cause. I have stopped 2 colonies with water alone, this spring. Towards spring keep the temperature down as low as possible; take every block from the entrance, give each colony plenty of ventila-

tion, but on bright, warm days, close the ventilation of the cellar, and open it at night.

There will be a general worry towards spring that you can do nothing for except to sprinkle the fronts of the hives with water, or keep a wet cloth on the tack. The first pleasant day, when the temperature is 40° or 45° in the shade, set them out. If you use loose bottom-boards, clean off the dead bees as you set them out; then keep the entrances closed to within  $\frac{1}{2}$  an inch, to keep them from swarming out. Watch them closely to prevent accidental loss of swarms. Be sure to commence watering them the next day with warm water, at some convenient place near the yard. This will save many thousands of bees. Continue it all the spring, for it is one of the greatest helps in the business.

I have had 10 years experience in selling honey. When I began, I found comb honey, from the body of the hive in Langstroth frames, on the market at 30 cents per pound, and extracted honey was unknown. I run my apiary for both comb and extracted honey; about  $\frac{3}{4}$  extracted. I began by convincing the druggists that my extracted honey was pure, and succeeded in selling them 500 pounds of white clover honey, at 25 cents per pound. It saved them 5 cents per pound, and the trouble of getting it from the comb themselves. I then sold my basswood honey from house to house, at 20 cents per pound, and I soon found that it was necessary to have a wholesale price, which I fixed at 16 $\frac{1}{2}$  cents a pound, and succeeded in selling my whole honey crop (over 3,000 lbs.) in my home market. I sold 800 pounds of comb honey in two-pound sections at 25 cents per pound; this I have kept up with slight variation, and a steady decline in prices, till comb honey retails slowly at 20 cents; wholesale, good at 15 cents. For extracted honey, wholesale, 10 cents, and retail 12 $\frac{1}{2}$  cents, with demand good. Almost a fabulous amount of pure honey was sold in this market, last year. My sales are, up to date, 6,000 pounds during the past year. I have used the pamphlet, "Honey as Food and Medicine," also a card of my own get up. I find these gives me a vantage ground; save much time, tell the people at a glance with whom they are dealing, save mistakes, bring me many orders and sales that I should not otherwise get, and hasten acquaintance. It takes years to establish a business integrity, which these help to gain more quickly. That is the foundation of success; it is our capital, and should be valued highly. I use these cards in the cities near me, deliver the honey in person when I get orders enough to pay me to go, but always take along more honey than is ordered. I receive but few orders for less than 25 pounds, and often 50 and 100 pounds. I sell a little cheaper by the hundred, but make no difference on 25 or 50 pounds.

To get the full advantage of circulars, a first-class quality of honey has to be delivered in every case; if not,

the advertisement proves a damage; but now honey has to be a thoroughly good article, and well ripened in the hive.

Medford, Minn.

For the American Bee Journal.

### My Report on Wintering.

JOHN YODER.

I put 53 colonies into the cellar Nov. 13, 1883, and took them out April 18, 1884. My cellar is 25x16 feet, made of stone and brick; and under the kitchen a 3-inch ventilating pipe reaches down from the chimney, then along the cellar floor to a little room 16x8, partitioned off one end of the cellar. Into this room I put the 53 colonies in 2 rows 4 deep; the bottom row standing on empty bee-hives. Each hive was setting on its own bottom-board, and each had an oat-hull cushion on the top, and also contained 30 pounds of good white honey. During all the forepart of the winter, the thermometer ranged from 42° to 46°, and the latter part 49°.

About Feb. 1, the bottom rows commenced to show signs of diarrhoea, and a little later the second row showed the same, and soiling the entrances of the hives badly. So the disease spread upward slowly. I could not well put them out without disturbing the top rows, which were as clean as when I put them in. When I put them out, I found the bottom rows had used nearly all their honey, the top rows using the least; but all quite clean inside. One had starved to death after using at least 30 pounds of good honey. One out of 53 is not bad I think. I took up 2 bushels of dead bees.

The last 2 winters my bees were in the same cellar, prepared the same way, and were in about the same length of time, and only consumed on an average 9 pounds of honey. I think my cellar was too warm, and there must have been some difference in temperature between the bottom and the top of the cellar, to cause the difference in the keeping of the bees; at all events I think the bottom rows commenced to breed, then commenced to eat pollen, thus causing diarrhoea. They must have bred a lot somewhere, and the old ones "jumped off the stage," or where would all the dead bees come from?

I hear of a great many bees dying in Elgin county and elsewhere. I use the Quinby hanging-frame hive with no division-boards, nor holes in the comb. I cannot see but what empty comb or combs, in a hive with a small colony in the centre, is not as well protected as though they had a division-board in them. The season is late, and there is not much pollen yet. It is very dry here. A little rain would make it jubilant for the bees.

Springfield, Ont., April 28, 1884.

The Kentucky Bee-Keepers' Convention meets in Louisville, Ky., during the opening of the Exposition (day not fixed).  
N. P. ALLEN, Sec.



For the American Bee Journal.

**Description of my Hive.**

G. I. WILLIS.

I make my hives about 3 inches deeper than the frames, which are 10x15 inches, inside measure. I nail on the side of the hive, in each corner, 1 inch strips 10 $\frac{1}{4}$  inches high. To these strips I nail laths about  $\frac{1}{4}$  inch apart, and then fill with straw or chaff back of this, putting on a plate or strips reaching from one corner post or strip, to the other, thus making a 4-inch, permanent, chaff wall. Then put metal rests on these end plates for the frames to rest upon. My frames run lengthwise of the hive. I make a passage way for the bees under one of the chaff walls.

For winter preparation, I take out all of the frames except 5 or 6, and put them in the centre of the hive, and slip my division-boards upon both sides of the frames, which leaves about 4 inches on either side. These spaces I fill with chaff or straw, and also on top of the frames. Thus the bees are completely encased in straw or chaff.

It is considerable work to prepare them in this way; but then, I think it pays every time. It is a great satisfaction to me to see my 28 colonies so snugly packed in this way. They all came through this extreme cold winter so nicely. Packed in this way, the brood-chamber is kept perfectly dry and warm.

My frames are closed ends, and top and bottom narrow, so they can be slipped up snugly together for packing, and yet not crush the bees. I have in my mind a device that can be used with narrow frames, to prevent them from coming together and crushing the bees.

The advantages of this hive for summer use is: 1. In the spring, as soon as the weather becomes warm, I take out the straw or chaff on the top and sides, and enlarge my hive to the capacity of 10 frames, as the bees need them.

2. It is so much easier to get to the frames than in a hive where they come up flush to the ends, and are stuck fast with propolis. With the frames resting on metal rests on the end plates, 3 inches from the ends of the hive, it is impossible for the bees to fasten them.

3. With the walls of the hive running 3 inches above the frames, and the roof made with a 3-inch strip on the sides, it gives plenty of room for a case of sections inside, without adding a second story; though if it is desired to add a second set of frames, I only need to put on a super or large section, and I have a complete two-story hive for extracting. The Root chaff-hive, as I understand it, is always a two-story. This, I think, would be an objection. Another advantage in having the sides, and ends also, run 3 inches above the frames, is that it gives room for chaff for winter packing.

I have always had a great deal of trouble in fastening foundation in the

brood frames. Last season I experimented by putting it down to the bottom-bar, and leaving the space above; in this way it needs no rubbing down to the frame, or melted wax, or any fastening at all, other than the wires. The bees will run little fastenings along the wires at the top, and fasten them to the top-bar, and then fill the spaces between. In this way I get a solid comb for extracting.

I slant the roof of the hive like that of a house, and use shingles, double course, painting them well. This makes a roof that will not crack or leak, and will last for years.

Farmer City, Ill.

**Woodstock, Ont., Convention.**

The bee-keepers of Oxford County, Ont., held their first general meeting at Woodstock, on Saturday, April 19, at 10:30 a. m. After the routine business was disposed of, President J. B. Hall gave a report of his visit to Toronto in reference to the passage of a Bill relative to bees affected with foul brood.

A motion was passed authorizing the secretary to correspond with the secretary of the Ontario association, with a view to bringing about such united effort as will result in the passage of such a law.

The meeting adjourned till 1 p. m. After the calling of the roll in the afternoon, the question of spring management of bees was taken up.

Dr. Duncan said that, as a rule, strong colonies will take care of themselves if they have sufficient food.

Mr. Hall said that weak colonies seldom paid for building up with brood taken from stronger colonies; while to stimulate with feeding would induce robbing to a great extent. As a rule he believed it best to let each colony stand on its own strength and resources, and if any failed to come up to the standard of excellence desired, double up and introduce a new queen, or give a queen-cell.

Mr. Frith said that management should begin in September, as the condition of the bees in the spring depended on that they were in when put into winter quarters.

Mr. Elpore did not favor building up weak colonies, by taking bees or brood from stronger ones.

Mr. Emigh said he thought plenty of food and heat were the principal requisites to secure strong colonies in the spring.

The question of spring feeding, or stimulation to induce breeding, was taken up, when the general impression seemed to be, that it did not pay until the weather became warm, and the season pretty well advanced.

Mr. Shannon said that bee-papers advanced the idea that as a general thing bees wintered inside were more subject to spring dwindling than those wintered out-of-doors; but he would like to hear the subject discussed.

Mr. Hall thought the cause for the idea being entertained, was due more to the fact that when colonies were taken out in the spring, they usually were very full of bees, a large portion

of which were old and ready to die, while those wintered out-of-doors allowed the old bees more opportunity to come out, hence the dwindling was less perceptible.

Mr. Emigh said he found that late feeding was sure to induce dampness.

Mr. Frith spoke on the meteorological effects of air, showing that when a current of cool air was allowed to pass through a bee-house or cellar, when it came in contact with the warm air inside, it expanded, thereby absorbing dampness, leaving the house in a dry and proper condition.

A high temperature was considered far preferable in wintering, as there was less danger from diarrhoea by honey that was not sealed or ripe when going into winter quarters. From 55° to 60° was considered the most desirable temperature.

Mr. Tennant said his bees had eaten an unusually large quantity of honey in wintering. The temperature of his cellar averaged less than 45°, but he thought if the temperature had been higher, less honey would have been consumed.

Mr. Hall thought pollen was very useful, and served as an important factor in successful wintering.

The disease of foul brood in bees was next discussed.

Dr. Duncan made a clear and intelligent exposition of the disease and its cure. When the question: "Is there any known cause for foul brood?" was elicited, Mr. Hall replied that there were many theories, but no positively known cause.

It was considered best to destroy bees affected with foul brood rather than attempt a cure, as it would in all probability be the cheapest in the end.

The best method of increase was the next subject discussed.

Mr. Emigh thought if the colonies were doubled, that would be a sufficient increase, and would advise increase by natural swarming.

Mr. Malcolm said for those wishing increase, rather than take off honey, it would be safe to increase two, or even three fold, if the season were favorable.

M. S. Schell explained his method of securing an increase of colonies during the last season, which was simply by making nucleus taken from the strongest and giving them capped queen-cells or young queens reared from the best colonies, taking special precautions to keep the nucleus warm.

The following question was next placed on the table by Dr. Duncan: From which colonies will we receive the most honey; the ones that are prevented from swarming as much as possible, or those that are allowed to increase a reasonable amount?

Messrs. Hall and Emigh were both of the opinion that taking the average season, the most honey would be received from the colonies that were allowed to increase; of course the honey taken from the new colonies being included with the old one.

In reference to making a display of honey at the fall Agricultural Exhibition, it was resolved that the ex

ecutive committee make such arrangements as may be deemed best.

Adjourned to meet on the 3d Saturday in next August, at 1 p. m.

For the American Bee Journal.

### Review of Unsettled Points.

EDSON J. SMITH.

No report of a trial with comb foundation should be given to the world by one who has made such advancement in bee-culture as has Mr. Heddon, when such comb foundation as the Vandervort and Olm are left out; both of which are equal, if not superior to any which were used in his trial; and it does the manufacturers of both of the machines great injustice. The Vandervort is the leading machine in this vicinity, getting nearly all the wax to make up, in preference to other machines.

Last year I used over 600 frames filled with the Vandervort foundation, and but 4 of them sagged. I use no wire, as I consider it useless when foundation is fastened in as it should be.

Double-walled hives are taking the lead in this county. At least  $\frac{3}{4}$  of the apiaries contain them, and the last year over 70 tons of comb honey was produced in them, in one and two-pound sections, and all being first-class honey. Though the losses were heavy in some localities last winter, here it was scarcely anything.

In the spring of 1881, my bees had come through the winter very strong, and bred up fast. About May 1 they commenced to bring in honey and pollen from the woods. The sun shone out in the morning very warm, there was no wind, and the bees went to the woods in large numbers; about 10 or 11 a. m., the wind blew up from the north very cold; and the bees on their return to the hives, became chilled, dropped on the ground and died. You could pick them up everywhere, loaded with pollen; and the consequence was that the colonies were not nearly so strong by May 15 as they were on April 1. Now, I know they were well wintered, and had the weather kept warm, they would not have dwindled; and yet, Mr. Heddon, on page 578 of the BEE JOURNAL for 1883, in reply to Mr. Mitchell's question, says: "It is my opinion that no bees ever spring dwindled that could rightfully be called well wintered."

If the wind comes from the north and blows hard and cold when the sun crosses the equinoctial in March, the bees will dwindle badly in the spring; but if the wind comes from the south, or if the weather is calm and the wind changeable, the effect on the bees will be opposite from the former condition.

Bees will not dwindle as badly in double-walled hives packed with chaff, or feel the excessive heat of summer, as in single-walled ones.

The black bees are the best to go to work in the sections, and build white comb which will take the first premium every time over that made by the Italians. The blacks are a hardier

race of bees, less liable to swarm or abscond, do not breed so fast after the honey season is over, and will not cling to the comb nor rob as quickly as the Italians.

I cannot agree with Mr. H. in regard to separators being cheaper. I am getting out 2,000 of them for one-pound sections, each one being long enough for two sections, and 500 for two-pound sections; the whole cost of which will be \$6.50, besides my own work, and I think they will last a lifetime.

Wood is preferable to tin for separators, as it is warmer and easier for the bees to cling to or climb on. As nearly all the honey in this county is glassed, we shall continue using separators, for we believe it pays to glass it when we can make \$6 per day for washing and glassing; and then the dealers demand it. As a proof of this, one firm in this vicinity bought over 7 tons of honey last fall, all of which was glassed.

New England.

For the American Bee Journal.

### Seneca County, O., Convention.

Met on Saturday, April 29, at Tiffin, with President Troxel in the chair.

"Early Spring Treatment" was the first topic discussed. Mr. Overmyer, of Sandusky county, advocated letting bees remain quiet, not disturbing them too much. After an examination sufficient to see whether they need feeding, and to see that none are motherless, they should then be left to themselves—no opening and breaking their clusters out of simple curiosity. Have a purpose when you open a colony, and when you do so, perform the operation as rapidly as possible, and then quit. They need to be kept warm so that breeding may go on rapidly. He advised using a division-board, and contracting the brood-chamber to the number of combs that the quantity of bees will cover and no more. As the weather gets warmer, and the bees increase in number, give more combs. Usually one comb at a time is sufficient, and always put the comb you give them in the centre, and not on the outside of the hive. In describing the different qualities of honey, he gave a description of a dark-colored honey the bees had gathered at his apiary in Ottawa county late in the season, from the tall cane growing on the low lands along Lake Erie. He found that any colonies going into winter quarters with any of this quality of honey uncapped, was fatal to the colony. The bees gathered this from the blades of the cane, and he believed, upon examination, that it was the product of a plant louse. He doubted very much whether there was any such thing as "honey dew."

Mr. Feasel thought it unnecessary to contract the space in brood-chamber, believing that the bees would see to that, and generate heat sufficient to protect and mature the brood. He had read in a bee-paper of a case where bees had generated heat sufficient to melt down their combs when the thermometer was below zero. He

was quite sure that there was such a thing as honey dew when the conditions were favorable for its formation.

Mr. Martin did not believe in any such reports that bees could generate heat sufficient to melt down combs, when the thermometer was below zero. Bees, he said, had no nose, and did not breathe by means of lungs as animals do, nor yet by gills as fish do, but through small holes called spiracles under their wings. It was simply an impossibility for 40,000 bees—a strong colony—to inhale sufficient oxygen to produce that amount of heat. He believed that bees frequently, when severe cold continued for an unusual length of time, exhausted their physical strength and died from over-exertion, in their efforts to keep warm, by their rapid breathing, as that is the only means they have of increasing the temperature in their hives. We all know that one way to warm up, when very cold, is to breathe rapidly for a short time.

Adjourned till 1 p. m.

At 1 p. m. the association met with an increased attendance. A general examination of honey, hives, etc., took place.

"What kind of hive shall we use?" and "Bee Pasturage," were the topics for the afternoon session. Mr. Overmyer explained his process of transferring. He said he used two kinds of hives, the Langstroth and the Gallup. He believed in having large hives, so as to give plenty of room, and when any colony weakens from any cause, contract space by a division-board. He explained extracting honey, and said that last summer he obtained 41 barrels of honey from 175 colonies—spring count, in 9 days—mostly from linden, as white clover was very scarce in this locality.

Mr. Martin explained, for the beginners, the process of transferring and putting a new swarm into the hive. Would not transfer too early; not before the fruit trees are in bloom, and not then on any day when the bees could not fly in safety from cold blasts of wind. He preferred the standard Langstroth hive.

Mr. Feasel said he used the Langstroth hive and worked for comb honey; explaining fully his mode of securing honey in sections. He said if he obtained 25 pounds as an average from all colonies, old and young, it was equal to the large yields from spring count. Can take one good strong colony in his apiary, in early spring, and increase to 10 or 12 good colonies by the time white clover and linden open.

Mr. Troxel gave his experience with the Langstroth hive. He said he worked for both comb and extracted honey. He exhibited some very fine specimens of comb foundation, of his own manufacture.

The subject of "Bee Pasturage" was postponed until the next meeting.

Several new names were added to the membership list of the association, and the next meeting promises to be one of unusual interest.

Adjourned to meet May 17.

E. J. C. TROXEL, Pres.

J. T. MARTIN, Sec.



## SELECTIONS FROM OUR LETTER BOX

### White Clover Looks Promising.

My bees are all in fine condition; no loss in wintering. This is the fourth winter I have packed my bees in chaff out-of-doors without loss, and I am still satisfied with chaff packing. Bees are now gathering honey rapidly, and building comb. Everything bids fair for a good honey crop. White clover never looked better at this time of the year, and this is from which we get our honey, if we get any surplus at all. The Langstroth hive is taking the lead in this locality, and the deep frame is becoming a thing of the past. Bees suffered terribly during March and April, where they were not protected; many have lost all either by spring dwindling or robbing.

J. G. NORRIS.

Macomb, Ill., May 1, 1884.

### Bees Starving in June.

I think there is no foul brood in this section of the State. There are many who keep a few colonies, and some lose all by starvation in June. I live in the Blue river valley, and in the spring the bees work on maple, willow, gooseberry and raspberry blossoms; but in June, for about three weeks, nothing blooms, and the bees have to be fed. After July 1, comes sumac, heart's-ease, snowdrop, catnip, etc., until frost, and bees do well during this time. I have 15 colonies of hybrid bees, which I expected to increase to 50, but the weather has been very cold and wet.

DAVID M. IMLAY.

Seward, Neb., April 28, 1884.

### All is Lovely with my Bees.

My bees wintered well in the cellar. In 30 colonies there is not one moldy comb. The tops of the hives were all removed, and the honey boards left open. I am satisfied that more bees die from lack of ventilation than from any other cause. The first fruit blossoms have just appeared, and today the cherry-trees are alive with the busy workers. We are expecting a good honey season.

I. P. WILSON.

Burlington, Iowa, May 2, 1884.

### Bees Swarming.

Bees have been doing nothing up to the 25th, but stock up in brood. For the last few days they have been doing finely; accomplishing more in the last four days than in all the rest of the spring put together. It has been cold and wet all through April. Not many colonies have swarmed, and those which did do so, took to the woods. The first swarm from a colony would stay and do finely, then the weather turned cold, the young queens all hatched out, and when they would come out, the bees would follow them and all make for the woods. I suppose it was owing to

their coming out to be mated, and the bees would follow them. If I am not correct in this, will some one give me the reason? I had as many as 3 swarms from one colony in the same day. I examined and cut out all the cells except one, and stopped the swarming. Hope I will not have many swarms this season.

DR. H. M. WILLIAMS.

Bowden, Ga., April 30, 1884.

### Wintered Well.

Bees in Central Ohio wintered well. The colonies are now strong in numbers. White clover is promising. I think we shall have an abundant honey crop.

AARON BENEDICT.

Bennington, O., May 6, 1884.

### Moving Bees 200 Miles.

For 4 years I have been engaged in bee-culture; but I have been residing in a rather unfavorable location (Bates Co., Mo.) for the business, until April 3, 1884, when I shipped my 50 colonies to Carrollton, Mo. They were in the car about 30 hours, and were moved a distance of over 200 miles. In these colonies are 600 nice, straight combs in movable frames, and all came through with the loss of only 3 combs broken; but the bees were in fine condition after their trip. My bees are nearly all Italians. I am very much interested in bee-culture, and shall continue making it a study.

ELI E. STARKEY.

Carrollton, Mo., May 5, 1884.

### Heavy Losses of Bees.

Our bees at the College are doing well. I am sorry to learn that the losses have been heavy in many parts of the country. The time when ignorant bee-keeping would succeed, is gone by.

A. J. COOK.

Lansing, Mich., May 7, 1884.

### Fruit in Bloom, but no Nectar.

Ninety out of 96 colonies came through the winter. Sixty, which were covered with fodder, did not winter as well as the 36 in double-walled hives on the summer stands. The 6 lost were among those covered, and 2 of them were unusually strong when covered last fall. Some drone brood is now sealed with a few drones out of the cells. Some drones were kept through the winter. Wet, cool weather has delayed breeding, and bees are still inclined to rob, with a profusion of fruit-bloom open; but the cool nights prevent a secretion of nectar. Some colonies have too much honey left. Figwort has come up very thickly where the plants were cultivated among the corn last year. The prospect is good for a fine honey-flow.

WILLIAM CAMM.

Murrayville, Ill., May 4, 1884.

### Bees Gathering Honey.

Bees are gathering honey rapidly from the early yellow flowers. I do not know their name.

WICKLIFF FISHER.

Hamler, O., May 5, 1884.

### Smart-Weed Honey.

On page 267, D. R. Rosebrough complains that his bees did not winter well on late honey. I want to ask him if there was any smart-weed bloom in his locality. A few years ago, in this locality, we had no honey crop until smart-weed bloom; it was thick all over the country; and bees were in need, and worked it very greedily; and the result of this honey (or something else it may be), was that nearly all the bees died during the winter, or left the hive the first warm days of spring. I think I am safe in saying that not one colony in 10 survived to May 1. They left the hives full of honey, but filthy. I received one dissatisfied colony three times, but could not make it stay. I am satisfied that the trouble was in the honey, and have about condemned smart-weed as unfit for winter stores. If I am wrong, I would like to be convinced, for we can nearly always depend on a crop of smart-weed here.

J. B. MILLER.

Montezuma, Iowa, May 1, 1884.

### Bees Confined 161 Days.

My bees wintered nicely; part of them being in the cellar and the rest on the summer stands. One colony did not have a flight for 161 days, and it came through in good condition.

G. W. DUNBAR.

Embsen Centre, Me., May 5, 1884.

### Small Loss in Wintering.

Bees in this section are in for a big boom this season. I never saw them in as fine condition at this time of the year, and the loss of the past winter will not average 1 per cent. The greatest loss was with myself. I have only a very small portion of my apiary left, but hope for the best.

J. H. ROBERTSON.

Pewamo, Mich., May 6, 1884.

### Good Increase.

I started one year ago with 3 colonies, and now I have 10 strong ones. I lost one colony by not giving it enough bees last fall. There was not more than 1 pint of bees in the hive, and they froze to death. I use the Armstrong hive. I wintered my bees out-doors on a north slope of ground, fully exposed. The trees are just commencing to bloom, and the bees are beginning to work, but I have not the time to manage them as they should be.

P. E. VANDENBURG.

Jerseyville, Ill., May 3, 1884.

### Juneberry.

For more than 10 days past the bees have been diligently at work among the Juneberry (*Amelanchier canadensis*) blossoms. In this vicinity these little trees are very abundant along the creeks and rivers, and are always white with blossoms long before the apple and plum trees bloom. In favorable weather it yields honey profusely; and up to date the bees here have stored from 3 to 8 pounds per colony, and are still at work. The

honey is of a light brown color, several shades lighter than buckwheat honey. Coming early into bloom as it does, and at a time when there are no other honey-bearing flowers to speak of, the Juneberry occupies an important place among honey plants. The Juneberry tree is receiving considerable attention at present among horticulturists, for its fruit. A number of cultivated European varieties are now being tested in our College nursery.

F. A. HUNTLEY.  
Ames, Iowa, May 6, 1884.

### Local Convention Directory.

1884. Time and place of Meeting.

- May 16.—N. E. Kansas, at Hiawatha, Kans.  
L. C. Clark, Sec.
- May 17.—N. E. Ky., at Covington, Ky.  
Adie O. Robertson.
- May 20.—N. W. Ills., and S. W. Wis., at Rockton, Ill.  
Jonathan Stewart, Sec.
- May 26.—Will County, at Monee, Ill.  
P. P. Nelson, Sec.
- June 6.—Mahoning Valley, at Newton Falls, O.  
E. W. Turner, Sec.
- Oct. 11, 12.—Northern Mich., at Alma, Mich.  
F. A. Palmer, Sec., McBride, Mich.
- Oct. 15, 16.—Northwestern, at Chicago, Ill.  
W. Z. Hutchinson, Sec.
- Dec. 10, 11.—Michigan State, at Lansing.  
H. D. Cutting, Sec., Clinton, Mich.

In order to have this table complete, Secretaries are requested to forward full particulars of time and place of future meetings.—ED.

## What and How.

ANSWERS BY

James Heddon, Dowagiac, Mich.

### Wax, Queens, Out-Door Feeding, etc.

1. What is the degree of temperature above which wax should not be heated?
2. How shall I dispose of the cappings, and rid them of the adhering honey, when I extract? I have purchased an extractor, but never used one, or saw one in operation.
3. Is it better to let colonies rear their own queens, or to give them cells from choice stock, or a thoroughbred queen?
4. Will out-door feeding stop robbing?
5. How are wax comb-guides made?
6. Do bees produce wax at pleasure?
7. Will mixed races of bees degenerate if allowed to rear their own queens?

DAVID M. IMLAY.  
Seward, Neb., April 28, 1884.

ANSWERS.—1. It should not be heated sufficiently to scorch it. My experience has led me never to heat it to a higher degree than is absolutely necessary.

2. Cappings should be first scraped into a receptacle with a coarse wire cloth bottom, till drained all thoroughly. Then place them loosely in flat pans, which put into an oven up from the bottom, with one of the oven doors a few inches ajar. Watch closely, and just as soon as all is

melted, set it out to cool. The wax will cake over the top, and while the honey below is yet warm, tap the wax cake at its edge, tip up the pan, and as nice honey as you ever saw will flow all clean from below the wax cake.

3. No; do not let the divided bees rear their own queen. Give them either a fully developed queen-cell or young queens.

4. Out-door feeding at certain times, if done just right, might stop robbing, but would need be persisted in till the natural honey flow took its place. With the inexperienced there will be great danger of encouraging robbing, and that, too, to a demoralizing extent.

5. Wax comb guides are things of the past. They were never practical, as they were not positively successful. Narrow strips of comb foundation (I would advise them not over  $\frac{1}{4}$  of an inch wide), are the very best comb guides known. What is still better and more economical in the end, is full sheets of comb foundation not too heavy, and in brood frames, pressed upon wires.

6. My opinion is that the production of wax is optional with the bees.

7. No. No race or mixture of races will degenerate by raising their own queens. My opinion is that many breeders do not get as good queens as the bees would rear if left to themselves. The bee-keeper has this advantage; he can rear all queens from a few colonies of superior traits of character, thus improving his stock from year to year. Breeding in the good and out the bad qualities of his stock. He can rear at will as good queens as are ever produced, if he knows how, and takes the pains.

### Convention Notices.

The Mahoning Valley Bee-Keepers' Association will hold its next meeting at Newton Falls, O., on June 6, 1884. It is desired that a display of apiarian supplies and samples of honey be made at that time. Mr. Hammon, of Bristolville, and Mr. C. R. Page, of Streetsborough, will read practical essays on topics pertaining to bee-keeping.

E. W. TURNER, Sec.  
LEONARD CARSON, Pres.

The Northwestern Illinois and Southwestern Wisconsin Bee-Keepers' Association, will be held at Rockton, Winnebago Co., Ills., on May 20, 1884.

JONATHAN STEWART, Sec.

Under a resolution adopted at the last meeting, an extra session of the Northeastern Kentucky Bee-Keepers' Association is called to meet at Covington, Ky., on Saturday, May 17, 1884, at 9 a. m., for the purpose of transacting such business as may come before it. It is hoped there will be a full attendance of the bee-keepers of Northeastern Kentucky. Membership fee, 50 cents.

ADIE O. ROBERTSON,  
Chm. Ex. Com.

There will be a meeting of the Northeastern Kansas Bee-Keepers' Association, at Hiawatha, Brown Co., on May 16, 1884. A general attendance of bee-keepers is expected.

Granada, Kan. L. C. CLARK, Sec.

The bee-keepers of Tuscarawas County will meet in the Town Hall at Port Washington, O., on Thursday, May 15, 1884, to organize a bee-keepers' association. All are earnestly invited to attend.

A. A. FRADENBURG.

### Honey and Beeswax Market.

OFFICE OF THE AMERICAN BEE JOURNAL, }  
Monday, 10 a. m., May 12, 1884. }

The following are the latest quotations for honey and beeswax received up to this hour:

#### CINCINNATI.

HONEY—There is no life in the market. Extracted honey sells in its regular way and to its wonted channels, without any speculative feeling about it, and brings 7@10c on arrival. Comb honey sells slow at 15@16c a lb. from store for choice.

BEESWAX—Is in good demand; choice yellow brings 35c a lb. on arrival.

CHAS. F. MUTH.

#### NEW YORK.

HONEY—White clover and basswood in 1 and 2 lb. sections, 14@16c. Dark and second quality, 13@14c; extracted white clover in kegs and barrels, 8@9c.

BEESWAX—Prime yellow, 34@35c.

THURBER, WHYLAND & CO.

#### BOSTON.

HONEY.—Demand light. 1 lb. sections comb honey, 18@20c; 2 lb. 16@18c. Extracted, 9@11c.

BEESWAX—35c.

BLAKE & RIPLEY, 57 Chatham Street.

#### CHICAGO.

HONEY—Extracted honey is a drug here. Very little of it is being used for manufacturing or baking purposes. Parties who last season used from 500 to 600 pounds, have for the past winter, bought not to exceed 100 pounds in a like period of time. Many producers are anxious to realize on their last season's product, but it is impossible to find purchasers, even at the low price of 6 and 7 cents per pound. Comb honey, stocks well reduced, but prices are low for anything short of fancy, quotable at 16@18c per lb.

BEESWAX—Scarce at 30@37c.

R. A. BURNETT, 161 South Water St.

#### SAN FRANCISCO.

HONEY—Only in a small jobbing way is there anything doing. Market is easy at the quotations, holders being anxious to close out stocks. White to extra white comb, 15@18c; dark to good, 10@13c; extracted, choice to extra white, 7@8c; dark and candied, 5@.

BEESWAX—Wholesale, 27@30c.

STEARNS & SMITH, 423 Front Street.

#### KANSAS CITY.

HONEY—Demand for choice comb still good, and moving freely at 15@16c for 2 lb. sections. Market bare of 1 lb. at present, with considerable inquiry for them. Extracted in fair demand at 8@9c for white, and 7@8c for dark. Very little of the latter now in this market, and a few thousand pounds would meet with very ready sale.

BEESWAX—None in this market.

JEROME TWICHELL, 514 Walnut Street.

#### ST. LOUIS.

HONEY—Steady; demand and supply both small. Comb, 12@14c per lb., and strained and extracted 6@8c.

BEESWAX—Firm at 32@32½c for choice.

W. T. ANDERSON & Co., 104 N. 3d Street.

#### CLEVELAND.

HONEY—Market continues very fair, particularly for choice 1 lb. sections, which are in good demand at 18c; 2 lbs. do not sell so readily, but in the absence of 1 lb. it moves at 17c. Second quality is very slow at 14@15c, and extracted not wanted at all in any shape.

BEESWAX—Very scarce; would bring 35 cts. on arrival for choice yellow.

A. C. KENDEL, 115 Ontario Street.

#### SAN FRANCISCO.

HONEY—We quote comb honey in 2 lb. sections, 18@20c; extracted, 7@8½c.

GEO. W. MEADE & Co., 213 Market St.



## Special Notices.

Examine the Date following your name on the wrapper label of this paper; it indicates the end of the month to which you have paid your subscription on the BEE JOURNAL.

For safety, when sending money to this office get either a post office or express money order, a bank draft on New York or Chicago, or register the letter. Postage stamps of any kind may be sent for amounts less than one dollar. Local checks are subject to a discount of 25 cents at Chicago banks. American Express money orders for \$5, or less, can be obtained for 5 cents.

We wish to impress upon every one the necessity of being very specific, and carefully to state what they desire for the money sent. Also, if they live near one post office, and get their mail at another, be sure to give us the address we already have on our books.

When writing to this office on business, our correspondents should not write anything for publication on the same sheet of paper, unless it can be torn apart without interfering with either portion of the letter. The editorial and business departments are separate and distinct, and when the business is mixed up with items for publication it often causes confusion. They may both be sent in one envelope but on separate pieces of paper.

It must be understood that, should an advertiser desire to cancel an unexpired contract, he can do so only by paying regular rates for the number of insertions his advertisement has had.

All money orders from foreign countries, should be made payable at Chicago, as the "Madison Street Station" is not an International office.

In reply to many correspondents let us say that we take any kind of postage stamps at their face value—including the 3 cent ones. Silver should never be sent by mail, as it endangers the loss of the letter either by thieves, or else breaks through the envelope and is lost in that way.

We carefully mail the BEE JOURNAL to every subscriber, but should any be lost in the mails we will cheerfully send another, if notified before all the edition is exhausted.

**Subscription Credits.**—We do not acknowledge receipt of each subscription by letter. The label on your paper, or on the wrapper shows the date to which your subscription is paid. When you send us money, if the proper credit is not given you, within two weeks thereafter on your label notify us by postal card. Do not wait for months or years, and then claim a mistake. The subscription is paid to the end of the month indicated on the wrapper-label. This gives a continual statement of account.

Advertisements intended for the BEE JOURNAL must reach this office by Saturday of the previous week.

## GETTING UP CLUBS.

To increase the number of readers of the BEE JOURNAL, we believe, will aid progressive bee-culture and help to elevate the pursuit. We, therefore, offer the following premiums for getting up clubs:

While no subscription to the BEE JOURNAL will be taken for less than the regular advertised prices (viz.: Weekly, \$2.00; Monthly, \$1.00),—any one getting up a club of two copies, or more, may select from "OUR BOOK LIST" anything therein named, to the amount of 15 cents for every dollar they send direct to this office, to pay them for the trouble of getting up the club; and these books will be sent, postpaid, to any address desired.

For a club of 3 Weekly or 6 Monthly and \$6.00, we will make an additional present of a Pocket Dictionary, bound in cloth, containing 320 pages.

For a club of 5 Weekly or 10 Monthly, (or a mixed club of both,) with \$10, we will, in addition to the 15 per cent, present a copy of the AMERICAN "POPULAR" DICTIONARY, comprising every word in the English language that enters into speech or writing; it contains 32,000 words and phrases, 670 illustrations and 512 pages; it is nicely bound in cloth, and will be sent by mail, postpaid, to any address desired.

Subscriptions for two or more years for one person, will count the same as each year for a different person.

## Apiary Register—New Edition.

All who intend to be systematic in their work in the apiary, should get a copy and commence to use it. The prices will hereafter be as follows:

For 50 colonies (120 pages).....\$1 00  
" 100 colonies (220 pages)..... 1 25  
" 200 colonies (420 pages)..... 1 50

The larger ones can be used for a few colonies, give room for an increase of numbers, and still keep the record all together in one book, and are therefore the most desirable ones.

Dzierzon's new work entitled "Rational Bee-Keeping," we now club with the BEE JOURNAL as follows: The Weekly for one year and the book, bound in cloth, for \$3, or in paper covers for \$2.75. The Monthly BEE JOURNAL and the book, \$1 less than the above prices. It is an imported book, printed in the English language, and the price of the book is \$1.50 bound in paper covers, or \$2.00 when bound in cloth.

Emerson Binders—made especially for the BEE JOURNAL, are lettered in gold on the back, and make a very convenient way of preserving the BEE JOURNAL as fast as received. They will be sent, post-paid, for 75 cents, for the Weekly; or for the Monthly, 50 cents. They cannot be sent by mail to Canada.

## Honey as Food and Medicine.

A pamphlet of 16 pages giving Recipes for Honey Medicines, all kinds of cooking in which honey is used, and healthful and pleasant beverages.

We have put the price still lower, to encourage bee-keepers to scatter them far and wide. Single copy 5 cents, postpaid; per dozen, 40 cents; per hundred, \$2.50. 500 will be sent postpaid for \$10.00; or 1000 for \$15.00. On orders of 100 or more, we will print, if desired, on the cover-page, "Presented by," etc., (giving the name and address of the bee-keeper who scatters them). This alone will pay him for all his trouble and expense—enabling him to dispose of his honey at home, at a good profit.

To give away a copy of "Honey as Food and Medicine" to every one who buys a package of honey, will sell almost any quantity of it.

Ribbon Badges, for bee-keepers, on which are printed a large bee in gold, we send for 10 cts. each, or \$8 per 100.

## "STUFF FOR STINGS."

Will cure all kinds of Bee-Stings. No more swelled Fingers and Faces. Will refund money if it fails. Per bottle, 25c. in stamps.

Monmouth Apiary, Freehold, N. J.  
20A1t F. C. LOCKWOOD.

## GOLDEN ITALIANS!

I now wish to say to my former customers, that I am now ready to fill orders for the following Queens.

Hybrid .....	in May and June, each.....	\$ .50
Italian—untested—not warranted, in May and June, each.....		1.00
Italian—warranted, May and June, each.....		1.50
Italian—tested Queen .....		2.50
Full colonies of Hybrids.....		7.00
Full colonies of Italians.....		10.00

20A1t L. J. DIEHL, Butler, Ind.

## Imported Italian Queens.

We made an arrangement to get them from the best location in Italy, while we were there a few months ago. Orders solicited.

19A2t MUCCI & BRO., LEXINGTON, KY.

## STANLEY'S Automatic Honey Extractor AND SMOKER.

Send for descriptive Circular and Prices to

G. W. STANLEY & BRO.,  
20A1t WYOMING, N. Y.

Dadant's Foundation Factory, wholesale and retail. See Advertisement in another column.

## NEW AND USEFUL Articles for the Apiary

Send for our 16-page illustrated Circular.  
18A1t HENRY ALLEY, Wenham, Mass.

## Given's Foundation Press.

PUBLIC SENTIMENT affirms that the PRESS is SUPERIOR for making Comb Foundation either in Wired Frames or for SECTIONS, and insures straight and perfect combs, when drawn out by the bees. Send for Circular and samples.

D. S. GIVEN & CO.  
1A1Bt HOOPESTON, ILL.

Dadant's Foundation Factory, wholesale and retail. See Advertisement in another column.

**HELLO! HELLO!**

We are now ready to Book Orders for  
**Bee-Keepers' Supplies.**

White Poplar  
Dovetailed

**SECTIONS**

A  
Specialty.

Everything fully up with the times, and  
**At Lowest Figures!**

Send stamp for 32-page Catalogue and Samples.

**APIARIAN SUPPLY CO.,**

7A6m WILTON JUNCTION, IOWA.

**Vandervort Comb Fdn. Mills,**

Send for Samples & Reduced Price-List.

ABt J. VANDERVORT, Laceyville, Pa.

**GOLD**

for the working class. Send 10 cents for postage, and we will mail you free, a royal, valuable box of sample goods that will put you in the way of making more money in a few days, than you ever thought possible at any business. Capital not required. We will start you. You can work all the time or in spare time only. The work is universally adapted to both sexes, young and old. You can easily earn from 50 cents to \$5 every evening. That all who want work may test the business, we make this unparalleled offer; to all who are not well satisfied, we will send \$1 to pay for the trouble of writing us. Full particulars, directions, etc., sent free. Fortunes will be made by those who give their whole time to the work. Great success absolutely sure. Don't delay. Start now. Address STINSON & Co., Portland, Maine.

4A1y

**FLAT-BOTTOM****COMB FOUNDATION,**

high side-walls, 4 to 16 square feet to the pound. Circular and samples free.

J. VAN DEUSEN & SONS,  
Sole Manufacturers,  
Sprout Brook, Mont. Co., N. Y.

Dadant's Foundation Factory, wholesale and retail. See Advertisement in another column.

**\$66**

a week at home. \$5.00 outfit free. Pay absolutely sure. No risk. Capital not required. Reader, if you want business at which persons of either sex, young or old, can make great pay all the time they work, with absolute certainty, write for particulars to H. HALLETT & Co., Portland, Maine.

4A1y

**65 ENGRAVINGS.****THE HORSE,**

BY B. J. KENDALL, M. D.

A TREATISE giving an index of diseases, and the symptoms; cause and treatment of each, a table giving all the principal drugs used for the horse, with the ordinary dose, effects and antidote when a poison; a table with an engraving of the horse's teeth at different ages, with rules for telling the age of the horse; a valuable collection of recipes, and much valuable information.

Price 25 cents.—Sent on receipt of price, by

**THOMAS G. NEWMAN,**

925 West Madison Street, CHICAGO, ILL.

**Muth's Honey Extractor,**

Square Glass Honey Jars, Tin Buckets,  
Langstroth Bee Hives, Honey Sections, etc.

Apply to **C. F. MUTH,**

976 and 978 Central Ave., CINCINNATI, O.

Send 10c. for Practical Hints to Bee-Keepers.

**A PRIZE,**

Send six cents for postage, and receive free, a costly box of goods which will help you to make more money right away than anything else in this world. All of either sex, succeed from first hour. The broad road to fortune opens before the workers, absolutely sure. At once address, TRUE & Co., Augusta, Maine.

**Sixth Thousand Just Published!****New and Enlarged Edition**

OF

**BEES and HONEY,**

OR THE

Management of an Apiary for Pleasure and Profit; by

**THOMAS G. NEWMAN.**

Editor of the Weekly Bee Journal.

925 West Madison Street, Chicago, Ill.

It contains 220 profusely illustrated pages, is "fully up with the times" in all the improvements and inventions in this rapidly developing pursuit, and presents the apiarist with everything that can aid in the successful management of the Honey Bee, and at the same time produce the most honey in its best and most attractive condition.

**Appreciative Notices.**

FRIEND NEWMAN:—I acknowledge with pleasure the receipt, this morning, of a very beautiful book, entitled, "Bees and Honey, or, Management of an apiary for Pleasure and Profit; sixth edition, enlarged." The book opens with a kind, familiar face, and the whole subject matter is concise, easy and comprehensive. I read it with much pleasure.

T. F. BINGHAM.

Abronia, Mich., May 1, 1884.

I have received a copy of the revised edition of "Bees and Honey," and after examining the same, find it to be a very handy and useful book of reference on the subject of bees and honey, and believe it should be found in the library of all interested in the study of bees.

H. H. BROWN.

Light Street, Pa., May 8, 1884.

PRICE—Bound in cloth, \$1.00; in paper covers, 75 cents, postpaid.

**THOMAS G. NEWMAN,**

925 West Madison Street, Chicago, Ills.

A Liberal Discount to Dealers by the Dozen or Hundred.

**SECTION BOXES!**

One-piece and four-piece,  $4\frac{1}{4} \times 4\frac{1}{4}$ , per 1,000, \$4.25;  $5\frac{1}{4} \times 6\frac{1}{4}$ , per 1,000, \$4.75. Odd sizes made to order. Send for sample.

**J. P. MCGREGOR,**

20A1t Freeland, Saginaw Co., Mich.

**E. T. LEWIS & CO., Toledo, O.,**

MANUFACTURERS OF

All kinds of **Apiarian Supplies.** Special rates to Dealers. Send for Circular. 14Atf

**For Bees, Queens,**

Honey, Foundation, Hives, Sections, and all Apiarian Implements, send for Circular to

**FLANAGAN & ILLINSKI,**

1A1y Lock box 995, Belleville, St. Clair Co., Ills.

THIS PAPER may be found on file at Geo. P. Rowell & Co.'s Newspaper Advertising Bureau (10 Spruce St.), where advertising contracts may be made for it in **NEW YORK.**

**BEE-KEEPERS' SUPPLIES.**

Send a postal card for my Illustrated Catalogue for 1884.

**COMB FOUNDATION.**

On account of the prevailing scarcity of beeswax the price of comb foundation is now advanced 3 cents per pound above the price quoted in my Catalogue for 1884.

**BEESWAX.**

I pay 32c. per pound delivered here, for yellow Beeswax. To avoid mistakes, the shipper's name should always be on each package.

**CLOVER SEEDS.**

The present prices are as follows:

White Clover, \$15.00 per bushel, \$4.00 per peck, or 30 cts. per pound.  
Alsike Clover, \$12.00 per bushel, \$3.25 per peck, or 25 cts. per pound.  
Sweet Clover, \$10.00 per bushel, \$2.75 per peck, or 20 cts. per pound.

**NO. 30 TINNED WIRE**

For Brood Frames.

One ounce spools, each, - 4 cents.  
Postage, 2 cents extra.  
One oz. spools, per dozen, 40 cents.  
Postage, 13 cents extra.  
One pound spools, each, 40 cents.  
Postage 18 cents extra.  
One pound will wire about 175 frames.

**Eureka Wiring Tool,**

For pressing Foundation into wired frames. Something entirely new.  
Price, 50c. by mail; 40c. by express.

**WIRE NAILS,**

On account of a decline in the price of Wire Nails, I will make a discount of 15 per cent. from the prices quoted in my Catalogue, until further notice.

**CHEAP FOUNDATION MILLS.**

These Mills will make Foundation of any desired thickness, for either Section Boxes or Brood Frames.

PRICES:

4 inch Rolls.....	\$10.00.
6 " " ".....	15.00.
10 " " ".....	25.00.
12 " " ".....	40.00.
14 " " ".....	50.00.

**Vandervort Foundation Mill.**

6 Inch, Price, \$25.00.

It makes the finest extra thin Foundation for comb honey. For Sale by

**ALFRED H. NEWMAN,**

923 West Madison Street,  
CHICAGO, - - ILLINOIS.



**Special Offer  
For 90 days**

## THE BEST ELECTRIC BELT EVER MADE ONLY \$1



**A Positive Cure for RHEUMATISM, LIVER, STOMACH AND KIDNEY DISEASES, DISEASES OF THE BLOOD, SKIN DISEASES, FEMALE COMPLAINTS, PARALYSIS, NEURALGIA, CATARRH, LAME BACK, AND NERVOUS DEBILITY.**

**ORDER AT ONCE from this Advertisement.** Nothing saved by correspondence. **Good Agents Wanted.** Circulars in German and English. Address, naming this paper, **FORREST & CO., Sole Agents, 116 Flatbush Avenue, Brooklyn, N. Y.**

Having obtained the sole right to sell the **German Electro-Galvanic Belt** in America from the inventor, Prof. Conrad Ziegenfust of Berlin, we are determined, whatever may be the cost, to introduce them here at once. The price of the Belt has always been **six Dollars (\$6.00)**, but to induce invalids to give it a trial we will, for the next ninety days, send the **German Electro-Galvanic Belt for ONE DOLLAR**, provided you will cut out and send us the annexed coupon and give us your written promise to recommend the Belt if you find it as represented. This Belt is without doubt the best, strongest, and most scientifically constructed Electric Appliance ever introduced, being the invention of the great German Electrician, Prof. Ziegenfust, and has met with the most marvelous success in Europe, being recommended and endorsed by the entire Medical Profession of Germany. The inventor has in his possession letters from **Prince Bismarck** and several members of the **royal family**. A quarter of a million of them were sold in the German Empire last year. These Belts, unlike many so-called electric appliances, are very light and not disagreeable to wear, and generate a current that can be immediately felt. Their action is stimulating and at the same time soothing; causing the Stomach, Liver, Kidneys and Nervous System to act as nature intended they should. Curing thousands of cases that internal medicines failed even to relieve. Under no circumstances can it do any harm and must do good no matter what is the complaint. They are made of cloth, silk lined, and the Electric Discs are so arranged that they retain their strength 30 years.

### This Coupon is worth \$5.00.

If you will cut out this Coupon and send it to us with **ONE DOLLAR** in a registered letter we will send you postpaid by return mail, **One GERMAN ELECTRO-GALVANIC BELT** with full directions in both English and German. Write Name and Post Office Address very plainly and give your waist measure in inches.

**FORREST & CO., Sole Agents,  
116 Flatbush Avenue, Brooklyn, N. Y.  
CUT THIS OUT.**



## STORY & CAMP, ITALIAN BEES

Manufacturers and Wholesale Dealers in

## PIANOS AND ORGANS

Decker Bros.,  
Haines Bros.,  
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Simpson & Co.,  
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Estey,  
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The largest exclusively  
Piano and Organ house  
on the Continent.

Territory given. **Agents Wanted.** Protection guaranteed.

Catalogues free to any address.  
Write for our prices before buying elsewhere.

## STORY & CAMP,

188 & 190 State Street,  
CHICAGO.

203 N. Fifth Street,  
ST. LOUIS.

## Italian Queens! Nuclei.

**SECOND TO NONE! ORDER NOW!**

I rear my QUEENS by the best methods and from the best stocks for business. I send out no Queens that I would not keep in my own apiary. To convince you, send me an order. I will please you.

Queens, untested in June, \$1.50; July, \$1.25  
" tested in " 2.50; " 2.00  
Nuclei, 1 frame (L. size) June or July, 1.00  
" 2 " " " 2.00  
" 3 " " " 2.50

Price of Queen to be added to prices of Nuclei. Will give special rates to parties who want two or three Nuclei with tested or untested Queens. Address,

**W. C. LESTER,**

Washington Hollow, Dutchess Co., N. Y.  
18A3t

**HELP WANTED.**—1 agent wanted in every place to sell our new goods. Big pay. 40 samples only 10c. None free. Cut this out  
Acme Novelty Co., Clintonville, Conn.  
13A8t

**Bees, Hives, Extractors, Smokers, Dadant Foundation, and other Supplies.** ARTHUR TODD, Germantown, Philadelphia, Pa. 19A5t

## Bingham Smoker

Borodino, N. Y., Aug. 15, 1882.

**Cyprians Conquered.**—All summer long it has been "which and tother" with me and the Cyprian colony of bees I have—but at last I am "boss." Bingham's Conqueror Smoker did it. If you want lots of smoke just at the right time, get a Conqueror Smoker of Bingham. Respectfully,

G. M. DOOLITTLE.

**Prices, by mail, post-paid.**

Doctor smoker (wide shield) 3½ inch. \$2.00  
Conqueror smoker (wide shield) 3 " 1.75  
Large smoker (wide shield) 2½ " 1.50  
Extra smoker (wide shield) 2 " 1.25  
Plain smoker " 2 " 1.00  
Little Wonder smoker " 1½ " .65  
Bingham & Hetherington Honey Knife, 2 inch. 1.15

TO SELL AGAIN, apply for dozen or half-dozen rates. Address,

T. F. BINGHAM, P. M., or  
BINGHAM & HETHERINGTON,  
ABRONIA, MICH.

**ITALIAN QUEENS, DADANT FOUNDATION, and Supplies.**—It will pay you to send for Circular. E. F. SMITH, Smyrna, N. Y. 11A1t

**COLONIES**—8 Langstroth Frames, in light shipping box. \$ 4.50  
8 Thomas Frames, in light shipping box 3.00  
**NUCLEI**—2 or more, with tested queen 2.00  
2 or more, with untested queen 1.50  
**QUEENS**—Tested, by mail 2.00  
Untested, by mail 1.00

After June 1st, 25 per cent. off.

After June 1, tested, per dozen 12.00  
After June 1, untested, per dozen 9.00

Reared from Imported or Selected home-bred Mothers. No Foul Brood ever known here. Address, **C. WEEKS,**  
17A4t CLIFTON, Wayne Co., TENN.

**J. W. ECKMAN,**

DEALER IN

## Pure Italian Bees and Queens

For further information, send for Circular.

7A1y RICHMOND, Fort Bend Co. TEXAS.

## Early Spring! Order Now!

To introduce my Italian Queens, I will send one of my Tested Queens, if ordered before May 20th, for \$2. Warranted Queens, \$1. Send \$2 and less, in common letters, at my risk. **E. F. WALKER,**  
10A11t Box 342, DES MOINES, IOWA.

## CHEAP! CHEAP!

Full Colonies. Nuclei and Italian Queens. Send for Price List before buying elsewhere.  
**DAN. WHITE, New London, Ohio.**  
18A5t 5B1t

## The Eureka Wiring Tool

For pressing wire into Foundation. **Price, by mail, 50 cents.** Send for Circulars. FOUNDATION and EXTRACTORS for sale.

17A1t **C. M. RULAND, Rockton, Ill.**

**AGENTS** wanted for The Lives of all the Presidents of the U. S. The largest, handsomest, best book ever sold for less than twice our price. The fastest selling book in America. Immense profits to agents. All intelligent people want it. Any one can become a successful agent. Terms free. HALLETT Book Co., Portland, Me. 4A1y

## How to Prevent Swarming.

Send for our 23d annual Circular for particulars.  
18A1t **HENRY ALLEY, Wenham, Mass.**

1868. 1884.  
**HEDDON'S**  
COLUMN.

**BEST GIVEN**  
**COMB FOUNDATION.**

Wholesale and Retail.

I now have on hand a freshly-made lot of GIVEN COMB FOUNDATION, made from strictly pure domestic wax, thoroughly cleansed from all impurities. Sizes of brood and surplus,  $8\frac{1}{4} \times 16\frac{1}{4}$ , or Langstroth size. I have also Dadant's best Brood Foundation of same size; also Dadant's 11x11 for American frames. Send for prices, and state amount wanted. I offer a liberal DISCOUNT to DEALERS.

**HEDDON'S LANGSTROTH HIVE.**

I believe my Hive is growing in popularity, to a much greater degree, than is the business of bee-keeping. I am now prepared to furnish these hives made up, and in the flat, at very reasonable prices.

One Hive complete for comb honey..\$3.00

(The above will contain two cases complete with sections).

The above Hive complete for extracted honey.....\$3.00

The above Hive complete for both in one..... 4.50

One Hive in the flat..... 2.00

Five or over, each..... 1.50

No one should ever order these Hives in the flat, without ordering one made up complete to work by. Parties are advertising Hives as Heddon Hives, that in no wise embrace my principles. Judge only by those purchased from me.

**SECTIONS.**

I am now ready to furnish white all-Dovetail Sections as follows:  $4\frac{1}{4} \times 4\frac{1}{4} \times 6$ , 7 and 8 to the foot, per 1,000, \$6.50;  $5 \times 6 \times 2$ , per 1,000, \$8.00. All shipped from here.

**STUDENTS OF APICULTURE**

Will receive terms for 1884 on application.

**BEEES and QUEENS.**

If you contemplate the purchase of Bees in any shape, tested or untested Queens, it may pay you to send for my

**CIRCULAR for 1884**

And be SURE to state whether or not you have my Circular for 1883.

Address,

**JAMES HEDDON,**  
DOWAGIAC, Cass County, MICH.

**DUNHAM COMB FOUNDATION MACHINE.**

TESTIMONIALS.

MRS. FRANCES DUNHAM, De Pere, Wis.

Dear Madam:—We have made about 38,000 lbs. of foundation on your mills this year, and the foundation has given universal satisfaction; so much so, that several manufacturers have stopped manufacturing to supply their customers with our foundation. We have also manufactured about 10,000 lbs. of this foundation on the Vandervort machine for surplus boxes, and it has been equally a success, but for brood chamber foundation, yours is still unexcelled.

Yours,

Hamilton, Ill., Dec. 10, 1883.

CHAS. DADANT & SON.

MRS. FRANCES DUNHAM, De Pere, Wis.

Dear Madam:—I have made over 100,000 lbs. of foundation on one of your machines, and would not now take double the price I paid for it.

Yours very truly,

Beeton, Ont., Dec. 10, 1883.

D. A. JONES.

MRS. FRANCES DUNHAM:

All prefer the foundation I manufacture on one of your mills, to that made on any other machine. I have no difficulty in rolling it from 10 to 12 feet to the pound for sections.

Yours respectfully,

Genoa, Cayuga Co., N. Y., Dec. 12, 1883.

J. G. WHITTEN.

MRS. FRANCES DUNHAM:

After using one of your foundation mills for the past 3 years, we can't say too much in its favor. And for brood foundation, it stands head and shoulders above all.

Kenton, Ohio, Dec. 29, 1883.

Yours, SMITH & SMITH.

MRS. FRANCES DUNHAM:

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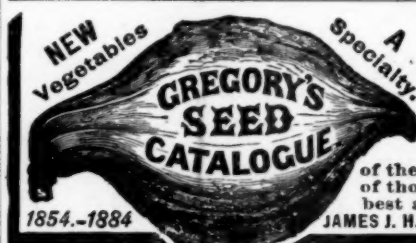
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